Index to Volume 63

AGNISOLA, C., 3
ALONSO-BEDATE, M., 373
Annual Ovarian Cycle and Plasma Levels of 17β-Estradiol in the Frog *Rana perezi*, 373
ARMITAGE, KENNETH B., 803

BAKKEN, GEORGE S., 965
BALDWIN, ANN LINDA, 1141
BANTA, PAMELA A., 683
BAUMMER, SHEILA C., 516
BAXTER, DUANE C., 722
Begging Response in Nestling Red-winged Blackbirds (*Agelaius phoeniceus*): Effect of Body Temperature, 965
BEUCHAT, CAROL A., 555, 1059
BILDSTEIN, KEITH L., 190
Bioenergetics of the Southern Catfish (*Silurus meridionalis* Chen). I. Resting Metabolic Rate as a Function of Body Weight and Temperature, The, 1181
BJORNDAL, KAREN, A., 710, 1232
BLACKBURN, DANIEL G., 722
BOLTEN, ALAN B., 710, 1232
BOOTH, DAVID T., 697
BOURNE, GEORGE B., 1, 140
BOZINOVIC, FRANCISCO, 1216
BRADFORD, DAVID F., 1157
BRAUN, ELDON J., 669, 1059
BRONSON, F. H., 948
BURGGREN, WARREN, 167
BURLESON, MARK L., 208
BURNETT, LOUIS E., 35
BUSHNELL, PETER G., 1012
BUTTEMER, WILLIAM A., 1043

CALDER, WILLIAM A., III, 1059
CAMERON, JAMES N., 909
Cardiac Activity and Pressure Change in the Lateral Pericardium of the Unrestrained Lobster *Panulirus japonicus*, 182
CECH, JOSEPH J., JR., 909
CHOI, IN-HO, 965
CLEMENS, DANIEL T., 288
Convergence of Solar Heat Gain in Two Squirrel Species with Contrasting Coat Colors, 1025
Cortical Influences on Diving Bradycardia in Muskrats (*Ondatra zibethicus*), 1098
CROCKETT, ELIZABETH L., 472
Crustacean Open Circulatory System: A Reexamination, The, 35

DEL RIO, CARLOS MARTÍNEZ, 987
DELGADO, M. J., 373
DERUYTER, MARIE L., 649
DEVRIES, P. J., 235
Dietary, Phylogenetic, and Ecological Correlates of Intestinal Sucrase and Maltase Activity in Birds, 987
Dietary Salt as a Physiological Constraint in White Ibis Breeding in an Estuary, 190
Digestive Fermentation in Herbivores: Effect of Food Particle Size, 710
Digestive Processing in a Herbivorous Freshwater Turtle: Consequences of Small-Intestine Fermentation, 1232
Digestive System Trade-offs and Adaptations of Frugivorous Passerine Birds, 1248
Diurnal Changes in Tissue Glutathione and Protein Pools of Molting White-crowned Sparrows: The Influence of Photoperiod and Feeding Schedule, 1118
DOYLE, MICHAEL, 167
DRIEDZIC, WILLIAM R., 615
DUDLEY, R., 235
DUMSDAY, BRYAN, 420
DUNHAM, ARTHUR E., 845
DWINNEL, BRIAN, 353
Dynamics of the Molluscan Circulatory System: Open versus Closed, 140

Ecological Energetics of Wintering Merlins *Falco columbarius*, 308
EDWARDS, ELIZABETH F., 432
Effect of Incubation Temperature on Development of *Crocodylus johnstoni* Embryos, 949
Effect of Reproductive State, Temperature, and Salinity on DNA and RNA Levels and Activities of Metabolic Enzymes of the Pyloric Ceca in the Sea Star *Luidia clathrata* (Say), The, 1196
Effect of Temperature on Evaporative Water Loss of the Australian Tree Frogs *Litoria caerulea* and *Litoria chloris*, 1043
Effects of Different Sodium Intakes on Renal and Cloacal Sodium Excretion in Chukars (Aves: Phasianidae), 408
Effects of Low Temperature and Food Intake on Ovulation in Domestic Mice, The, 948
Effects of Thyroxine on Standard and Total Metabolic Rates in the Lizard *Sceloporus undulatus*, 873
Effects of Thyroxine on Standard Metabolic Rate and Selected Intermediary Metabolic Enzymes in Field-active Lizards *Sceloporus undulatus*, 600
Embryonic Development of Japanese Quail (*Coturnix coturnix japonica*) as Influenced by Periodic Cold Exposure, 516
Energetics and Thermoregulation of *Popillia japonica*, Newman (Scarabaeidae, Coleoptera) during Flight and Rest, 921
Energy Costs and Temporal Organization of Torpor in the Rufous Hummingbird (*Selaspborus rufus*), 1082
Evidence for Two Oxygen-sensitive Chemoreceptor Loci in Channel Catfish, *Ictalurus punctatus*, 208

FACEY, DOUGLAS E., 757
Factors Modifying Rate of Water Loss from Birds' Eggs during Incubation, 697
FARRELL, A. P., 536
FARRELLY, CAROLINE, 117
Field Metabolism of Free-living Female Savannah Sparrows during Incubation: A Study Using Doubly Labeled Water, 353
FULLENWIDER, J. L., 821
Functional Morphology of the Coronary Supply of the Systemic Heart of *Octopus vulgaris*, 3

GEISER, FRITZ, 489
Geometry of Maternal-Offspring Contact in Two Rodents, 821
GOLDSTEIN, DAVID L., 408, 669
GORE, ROBERT W., 1141
GRAHAM, MARK S., 536
GRAY, C., 735
GREENAWAY, PETER, 117
GROSSMAN, GARY D., 757
GUTIÉRREZ, P., 373

HAIM, A., 795
HAND, STEVEN C., 443
Heart Rate and Hemolymph Pressure Responses to Hemolymph Volume Changes in the Land Crab *Cardisoma guanhumi*: Evidence for 'Baroreflex' Regulation, 167
Heat Produced as a By-Product of Foraging Activity Contributes to Thermoregulation by Verdins, *Auriparus flaviceps*, 777
HIEBERT, SARA M., 489, 1082
HOFFMAN, LOREN H., 722
HOULIHAN, D. F., 735
HUEY, RAYMOND B., 845

Incubation Time and Rate of Embryonic Development in Amphibians: The Influence of Ovum Size, Temperature, and Reproductive Mode, 1157
Integrated Cardiovascular Control in the Mollusca, 12
Integration of Osmoregulation and Energy Balance in Hummingbirds, The, Invited Perspectives, 1059

Interspecific Variation and Effects of Altitude on Blood Properties of Rosy Finches (*Leucosticte arctoa*) and House Finches (*Carpodacus mexicanus*), 288

JOHN-ALDER, HENRY B., 600, 873
JOHNSTON, IAN A., 615
JOHNSTON, JAMES W., 190
JONES, DAVID R., 1012, 1098
JOOS, BARBARA, 873
JORGENSEN, D. D., 140

KARASOV, WILLIAM H., 1248
KAVALIERS, MARTIN, 388
KENAGY, G. J., 489
KING, JAMES R., 1118
KURAMOTO, TAKETERU, 102, 182

Lactate Kinetics in Exercised Channel Catfish, *Ictalurus punctatus*, 909
LAWRENCE, JOHN M., 1196
LEVEY, DOUGLAS J., 1248
LONG, J., 821
LOWERY, MARY SUE, 630
LUTCAVAGE, MOLLY E., 1012

MCCLURE, P. A., 821
MCCULLOCH, PAUL F., 1098
MCMAHON, BRIAN R., 1, 35, 167
MANNING, JUDY M., 948
MATHERS, E., 735
Maximal Activities of Enzymes of Energy Metabolism in Cephalopod Systemic and Branchial Hearts, 615
MELCHER, JAYE C., 803
Metabolic Consequences of Viviparity in a Lizard, *Sceloporus jarrovi*, 555
Metabolic Cost of Maintaining Position for Four North American Stream Fishes: Effects of Season and Velocity, The, 757
Metabolism and Thermoregulation in the Cape Porcupine, *Hystrix africaeaustralis*, 795
MOORE, JOHN E., 710
Morphometric and Biochemical Factors Affecting Heat Loss in a Small Temperate Cetacean (*Phocoena phocoena*) and a Small Tropical Cetacean (*Stenella attenuata*), 432
Morphometrics, Airspeed, Thermoregulation, and Lipid Reserves of Migrating *Urania fulgens* (Uraniidae) Moths in Natural Free Flight, 235
MORRIS, STEPHEN, 253
MROSOVSKY, N., 587
MURPHY, MARY E., 1118
Muscle Metabolite Response to Exercise and Recovery in Yellow Perch (*Perca flavescens*): Comparison of Populations from Naturally Acidic and Neutral Waters, 886
Myocardial Oxygen Consumption in Trout Acclimated to 5°C and 15°C, 536

NELSON, JAY A., 886
NESTLER, JAMES R., 504
NEWMAN, ROBERT A., 845
NOVOA, F. FERNANDO, 1216
Nutritional Provision to Embryos in a Predominantly Lecithotrophic Placental Reptile, *Thamnophis ordinoides* (Squamata: Serpentes), 722

OERTLI, J. JAKOB, 21
OERTLI, MIRJAM, 921
Organic Ions as Modulators of Respiratory Pigment Function during Stress, Invited Perspectives, 253
Organ-specific Analysis of the Time Course of Covalent Modification of Pyruvate Kinase during Anaerobiosis in a Marine Whelk, 222
Osmoregulation in the Field by Salt-Marsh Savannah Sparrows *Passerculus sandwichensis beldingi*, 669
Osmotic and Ionic Regulation in the Aquatic Caecilian *Typhlonectes compressicauda* and the Terrestrial Caecilian *Ichthyophis kohtaoensis*, 649
OVERALL, KAREN L., 845
Oxygen Transport in the Leatherback Sea Turtle *Dermochelys coriacea*, 1012

PARSONS, ROBERT H., 571
Patterns of Metabolic Rate in Embryonic Crocodilians *Crocodylus johnstoni* and *Crocodylus porosus*, 334
PETRONIS, SHELLY, 571
Photoperiodism in House Sparrows: Testing for Induction with Nonphotic Zeitgebers, 587
Physiological Anatomy, Burst Formation, and Burst Frequency of the Cardiac Ganglion of Crustaceans, 102
Physiology of Invertebrate Circulatory Systems: An Introduction, The, 1
PINDER, ALAN, 167
POLLOCK, COLLEEN, M., 90
PORTER, WARREN P., 803
Pressure-Flow Characteristics of Crab Gills: Implications for Regulation of Hemolymph Pressure, 72
PRIOR, DAVID, J., 683
PROFETA, L., 821
Protein Assembly and Metabolic Regulation: Physiological and Evolutionary Perspectives, Invited Perspectives, 443
Protein Synthesis and Oxygen Consumption of the Shore Crab *Carcinus maenas* after a Meal, 735

RAHN, HERMANN, 697
REDMOND, J. R., 140
REEBS, STÉPHAN G., 587
Relationships between Respiratory Quotient and Metabolic Rate during Entry to and Arousal from Daily Torpor in Deer Mice (*Peromyscus maniculatus*), 504
Responsiveness of Deer Mice to a Predator, the Short-tailed Weasel: Population Differences and Neuromodulatory Mechanisms, 388
Resting Heart Rate of the Toad *Bufo marinus*: A Long-Term Study of Individual Differences and Environmental Influences, 420
Routes of Water and Small Solute Transport between Blood and Lymph in Frog, 1141
ROZUM, JOHN S., 1141

SALERNO, STEPHEN M., 571
Salt-load Effects on Osmotic Water Flow, Tritiated Water Diffusion, and Cardiovascular System in *Rana pipiens* and *Rana catesbeiana*, 571
Seasonal Changes in Energy Expenditure and Digestive Tract of *Abrothrix andinus* (Cricetidae) in the Andes Range, 1216
SEYMOUR, ROGER S., 334, 949
SHADWICK, ROBERT E., 90
SIDELL, BRUCE D., 472, 615
SKINNER, J. D., 795
SMATRESK, NEAL J., 208
SMITH, P. J. S., 12
Some Pathways of Energy Metabolism Are Cold Adapted in Antarctic Fishes, 472
SOMERO, GEORGE N., 443, 630
SPIERS, DONALD E., 516
Starvation Effects on Protein Synthesis in Red and White Muscle of the Barred Sand Bass, *Paralabrax nebulifer*, 630
STEWART, J. M., 615
STEWART, JAMES R., 722
STIFFLER, DANIEL F., 649
STOREY, KENNETH B., 222
STRICKER, STEPHEN A., 90
Structure and Biomechanical Properties of Crustacean Blood Vessels, 90
SUN, RUYUNG, 1181

TALBOT, COLLEEN R., 649
TAYLOR, H. H., 72
Thermal Influences on the Activity and Energetics of Yellow-bellied Marmots (*Marmota flaviventris*), 803
THORN, LISA M., 571
Torpor Bout Duration during the Hibernation Season of Two Sciurid Rodents: Interrelations with Temperature and Metabolism, 489

VAN AARDE, R. J., 795
Variation in Locomotor Performance in Demographically Known Populations of the Lizard *Sceloporus merriami*, 845

Vasculature of the Gas-Exchange Organs in Air-breathing Brachyurans, 117
VELOSO, CLAUDIO, 1216
VLECK, DAVID, 555

WALSBERG, GLENN E., 1025
WARING, C. P., 735
WARKENTIN, IAN G., 308
Water-Orientation Behavior in the Terrestrial Gastropod *Limax maximus*: The Effects of Dehydration and Arginine Vasotocin, 683
WATTS, STEPHEN A., 1196
WEATHERS, WESLEY W., 777
WEBB, D. R., 821
WEBB, G. J. W., 949
WEBSTER, MARCUS D., 777
WELSFORD, IAN G., 683
WEST, NIGEL H., 308
WHEATLY, MICHELE, 167
WHITEHEAD, PETER J., 334, 949
WHITWAM, ROSS E., 222
WILLIAMS, JOSEPH B., 353, 669
WORTHY, GRAHAM A. J., 432

XIE, XIAOJUN, 1181

YAMAGISHI, HIROSHI, 102